Stormwater Options Report

RTRR Property
18251 West Jefferson
Riverview, Michigan

Riverview-Trenton Railroad Company

March 3, 2021

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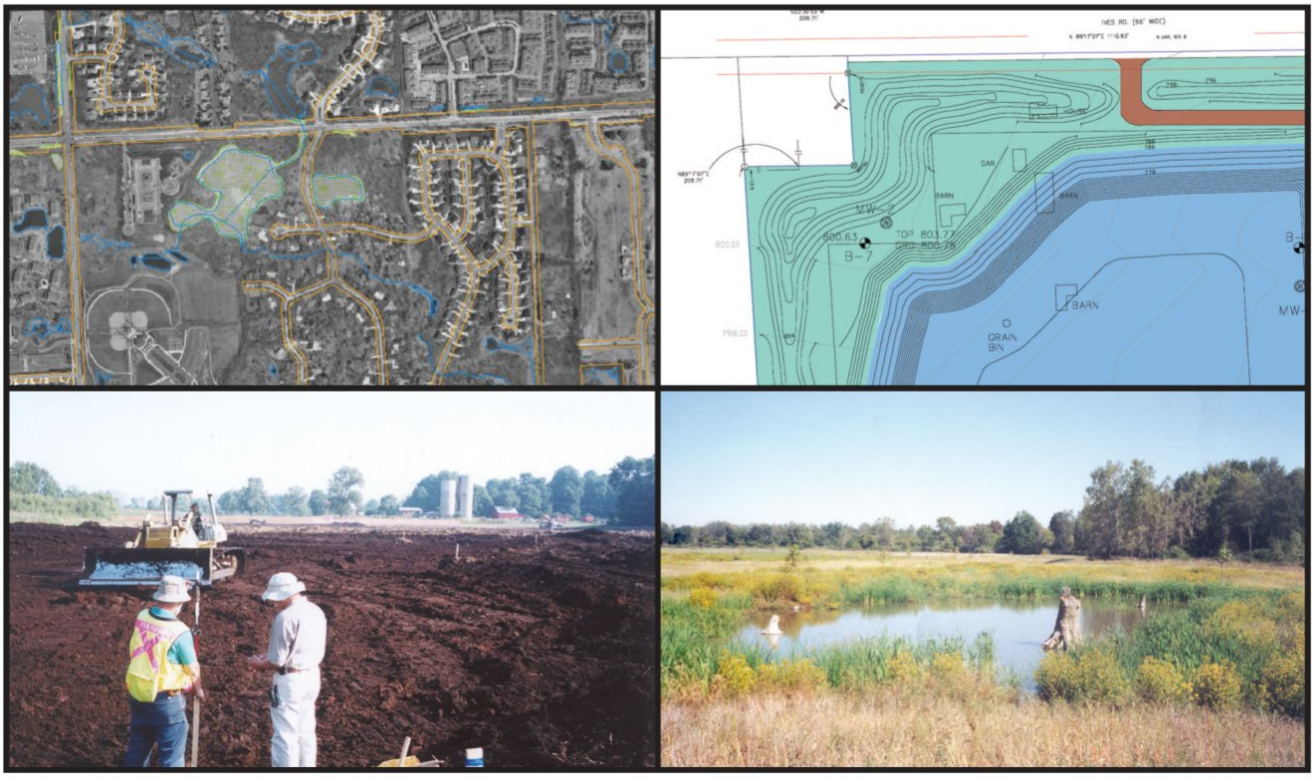

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Stormwater Options Report
RTRR Property
18251 West Jefferson
Riverview, Michigan

March 3, 2021

Report Prepared For:

Riverview-Trenton Railroad Company
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18251 West Jefferson Avenue, Riverview, Michigan

1.0 INTRODUCTION

ASTI Environmental (ASTI) has prepared this Storm Water Report for the approximately 76.2 acre portion of the former McLouth Steel site commonly known as the Riverview-Trenton Railroad ("RTRR") Property (Parcel Numbers: 51009030001000, 54001010082300, and 54001990006704) located at 18251 West Jefferson Avenue in Riverview and Trenton, Wayne County, Michigan ("Subject Property"). Additionally, a portion of Parcel Number 54001990007701 lies within the Subject Property. A Site Location Map is provided as Figure 1 and the Subject Property is depicted on Figure 2, including each parcel.

2.0 BACKGROUND

The McLouth Steel Company (McLouth Steel) operated a steel manufacturing facility on the property south of the Subject Property and acquired the Subject Property between 1956 and 1961. McLouth Steel used the Subject Property for storage of raw materials, waste, and product to support steel production between the time they acquired the property until about 1975. A large slag processing operation operated by E. C. Levy Company was also located on the Subject Property. After about 1975, production decreased at the McLouth Facility and McLouth Steel ceased operations in April of 1996 after filing for Chapter 11 bankruptcy protection in September of 1995. Hamlin Holdings, Inc. acquired the Subject Property in July of 1996. The Detroit Steel Company ("DSC") obtained title for the Subject Property in August of 1996 and used it for storage and conducted removal activities. DSC resumed pickling of strip steel at the McLouth Facility in July 1998. Those operations closed in 2005. On June 2, 2000, Crown Enterprises purchased the Subject Property but did not use it for any activities and conveyed the property to RTRR in November of 2000. All structures have been removed from the Subject Property and only two concrete pads remain.

McLouth Steel operated stormwater and wastewater discharges under a National Pollution Discharge Elimination System ("NPDES") permit during operations as a steel mill, but there is no evidence that a stormwater collection system or a point source discharge exists for the Subject Property.

3.0 OBJECTIVE

ASTI prepared the Stormwater Management Work Plan, dated June 28, 2019 ("Work Plan") to implement portions of the Statement of Work ("SOW") described in Attachment A of the Corrective Action and Consent Order ("CACO") dated November 1, 2018 for the Subject Property. The purpose of the Stormwater Management Work Plan was to provide an outline for preparing a feasibility analysis of stormwater management options to eliminate sheet flow to the Trenton Channel and Monguagon Creek (Figure 2). Unless otherwise provided herein, all terms used in this Stormwater Options Report are defined as provided in the CACO. The purpose of this report is to provide details for potential stormwater management options. Stormwater management options for the Subject Property include:

- Grade the Subject Property to collect stormwater. Grading would require future site development plans (future development is undetermined at this time),
- On-site retention,
- Discharge under a general permit,
- Discharge to the Trenton Channel under a National Pollutant Discharge Elimination System (NPDES), or
- Discharge to the City of Wyandotte or the City of Trenton Publicly Owned Treatment System (POTW).

This Stormwater Management Options Report is based on information from available site maps, topographical map, and ALTA survey, as well as site observations made in the field during site visits, to determine if sheet flow runoff occurs. Stormwater runoff sampling was not included as part of this evaluation.

4.0 STORMWATER MANAGEMENT OPTIONS

The following sections provide the potential stormwater management options and a description of each option.

4.1 Property Topography and On-site Retention

The site topographic plan in Attachment A shows the drainage pattern and storm water flow direction is depicted with arrows. Catch basins, constructed and natural drainage channels are not located on the property. Storm water is not retained after major storm events. The surface consists a sand and gravel layer which, was logged as the surface layer in many of the locations for the groundwater monitoring wells installed in October of 2019. Based on the topographic map, the east side of the site is sloped toward the Trenton Channel and the west side of the site is sloped toward the west. Construction of a berm along the Trenton Channel would assure that storm water does not leave the site and enter the Trenton Channel or Monguagon Creek.

Infiltration tests should be performed to determine the quantity of storm water that will be retained and the quantity of storm water that will infiltrate. The infiltration rate will also affect the height of the berm. Typically, the Standard Test Method for Infiltration of Soils in Field Using Double-Ring Infiltrometer (*ASTM D 3385-03)* is performed to determine infiltrations rates. The test is performed at the location and elevation of the bottom of the proposed detention pond.

4.2 Discharge Under General Permit

The Subject Property does not have a point source discharge, drainage channel or storm water discharge pipe which drains storm water from the Subject Property. A regional discharge pipe is located near the bank of the Trenton Channel which discharges storm water from West Jefferson Road and the area west of the Subject Property. The discharge pipe was not inspected during this evaluation. Discharge of non-contact storm water from a site does not require an NPDES permit unless the site is subject to the following rule contained in Part 21 Wastewater Discharge Permits:

> Rule 323.2104(u)"Storm water discharge associated with industrial activity" means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the national permits program under 40 C.F.R. §122.3 and §122.27 (2000). For the categories of industries identified in this subdivision, the term includes, but is not limited to, storm water discharges from all of the following.
>
> (xi) Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

If surface water is discharged from the Subject Property after development of the Subject Property, storm water samples should be collected and sent to an analytical laboratory for characterization to determine if a permit is required.

4.3 Discharge to the Trenton Channel Under a National Pollutant Discharge Elimination System (NPDES)

If, after development, a discharge of surface water occurs, storm water sample collection and analysis would be required. The storm water analysis would be based on what could reasonably be expected to be present based on historical use and current surface material. The permit criteria for discharge are based on the Water Quality Based Standards. The discharge will be compared to the Part 4 Water Quality Standards (Rule 323.1041 to R 323.1117) and the Part 8 Water Quality-Based Effluent Limit Development for Toxic Substances (Rule 323.1201 to 323.1221).

4.4 Discharge to the City of Wyandotte or the City of Trenton Publicly Owned Treatment System (POTW)

Discharge to the City of Wyandotte or the City of Trenton Publicly Owned Treatment System (POTW) is available if the storm water meets the pretreatment criteria for the POTW. Currently, storm water collection for offsite disposal is not available, there are no collection or storage structures. Construction of a berm along the Trenton Channel could create a storm water retention area. Conveyance of detained storm water to the POTW would require pumps, an onsite manhole and a new connection to a manhole in the existing wastewater collection system.

5.0 CONCLUSIONS

This Storm Water Options Report provides a summary of potential options to manage stormwater runoff at the Subject Property. Future development plans have not been completed at the time of this submittal. Stormwater management will depend on future use of the Subject Property and site design. The options presented above will be addressed during redevelopment planning to provide protection of stormwater runoff to the Trenton Channel and the Monguagon Creek.

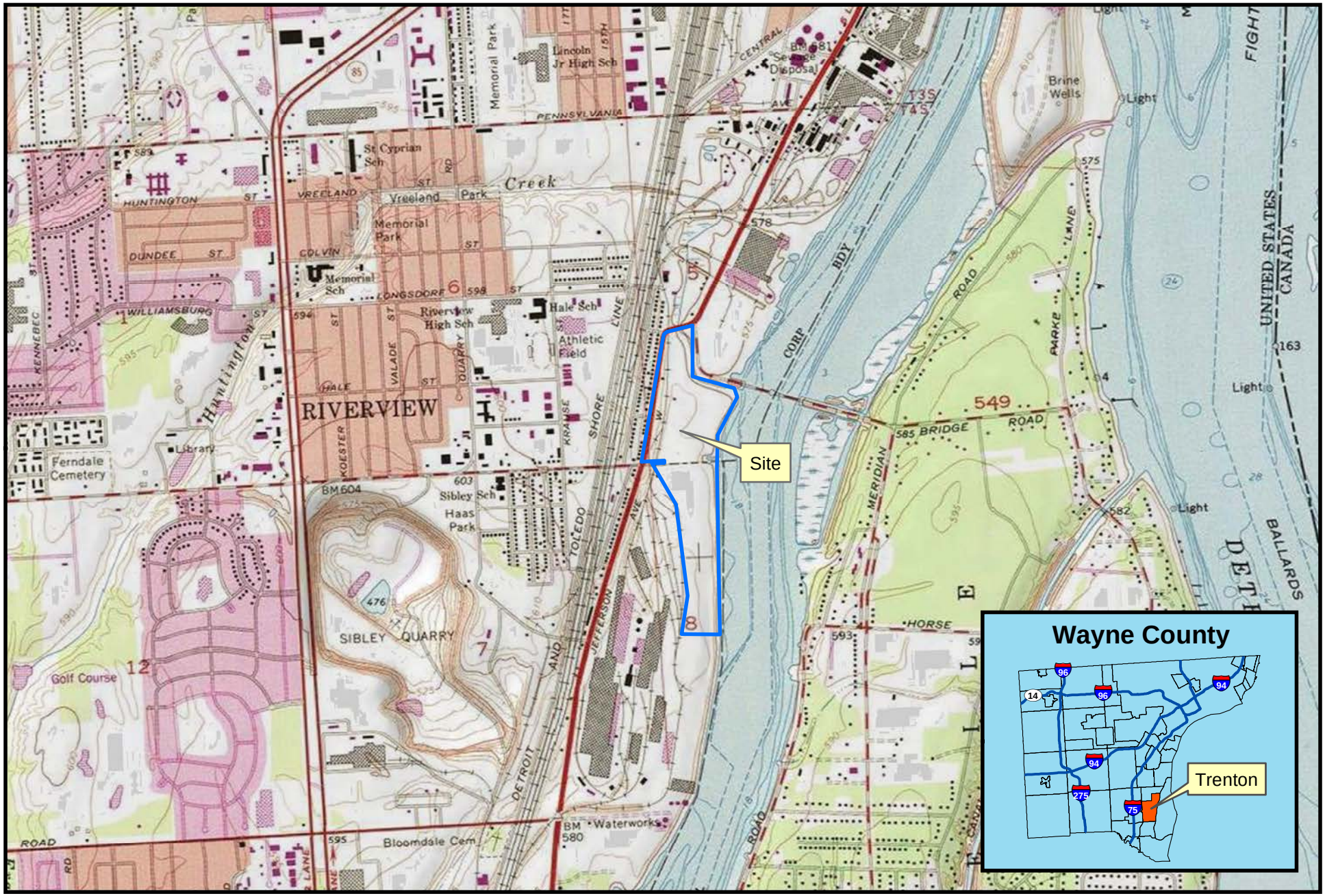
6.0 RCRA CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Greg S. Oslosky, P.G.
Director – Grand Rapids

Stormwater Management Options Report
Riverview-Trenton Railroad Property
18251 West Jefferson Avenue, Riverview, Michigan

Figures



Former McLouth Steel Trenton Plant

1491 West Jefferson Avenue
Trenton, MI

ASTI Environmental

Created for: MCS Land Company, LLC
Created by: BJG, January 17, 2018, ASTI Project 10391

Figure 1 - Site Location Map

LEGEND

Subject Property

Approx. Parcel Boundary

0 400 800 1200

Approximate Scale in Feet

RTRR Property

18251 West Jefferson Avenue, Trenton, MI

Environmental

N

Created for: Riverview-Trenton Railroad Company

Figure 2 - Property Site Plan (with parcels)

ASTI Project 10860, JMD, June 27, 2019

Stormwater Management Options Report
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18251 West Jefferson Avenue, Riverview, Michigan

Attachment A

Topographic Survey North
Topographic Survey South

MATCHLINE

MATCHLINE

MCLOUTH RTRR TOPO SURVEY

SCALE: 1" = 120'

DATE	REVISION

McLouth RTRR

JEFFERSON AVE — RIVERVIEW TRENTON

DRAWN BY JMH

Crown Enterprises, Inc.

12225 Stephens — Warren, Michigan

DATE 2-7-18

Topo Survey

P1

MATCHLINE

MATCHLINE

MCLOUTH RTRR TOPO SURVEY

SCALE: 1" = 120'

DATE	REVISION

McLouth RTRR

JEFFERSON AVE — RIVERVIEW TRENTON

DRAWN BY: JMH

Crown Enterprises, Inc.

12225 Stephens — Warren, Michigan

DATE: 2-7-18

Topo Survey

P2

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